2013-2014 Influenza Report

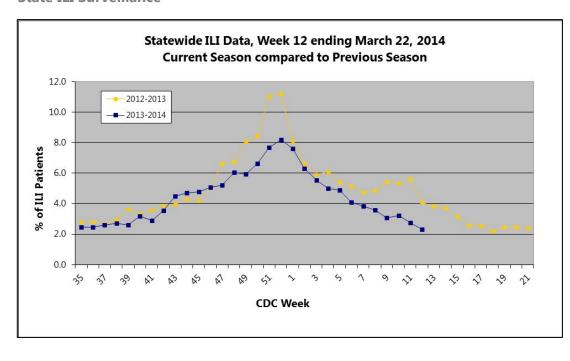
Week 12

March 16 - March 22, 2014

About our flu activity reporting

MSDH relies upon selected sentinel health practitioners across the state to report the percentage of total patient visits consistent with an influenza-like illness (ILI: fever of 100°F or higher AND cough and/or sore throat). Also, providers are supplied with specimen collection kits. Samples are submitted to the Mississippi Public Health Laboratory for influenza PCR testing. Reports are used to estimate the state's ILI rate and the magnitude of the state's influenza activity. Reports represent only the distribution of flu in the state, not an actual count of all flu cases statewide. *Information is provisional only and may change depending on additional reporting from sentinel providers*.

State ILI Surveillance



The state ILI rate had been slowly, but steadily increasing since week 41.
Beginning in week 01 however, the overall state ILI rate began to decrease.

During week **12**

(03/16/14-03/22/14), the overall state ILI rate (**2.3%**) was **comparable** to the previous week (**2.7%**), but was lower than this time last year (**4.1%**). | Figure 1

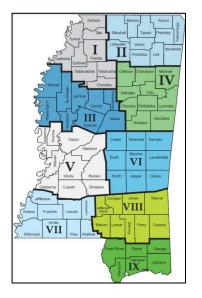
Total number of patients treated by sentinel providers in the last three weeks. | Table 1

2013-2014 Influenza Season

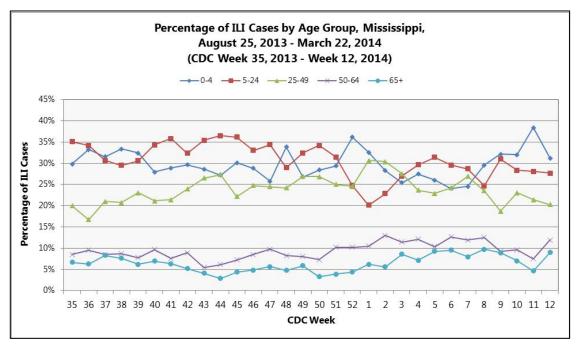
| CDC Week | Week Ending | Total patients | ILI symptoms | ILI Rate (%) |
|----------|-------------|-----------------------|--------------|--------------|
| 12 | March 22 | 13407 | 311 | 2.3% |
| 11 | March 15 | 14492 | 395 | 2.7% |
| 10 | March 8 | 16363 | 526 | 3.2% |

During week 12, one district (6) had an increase in ILI activity, while four districts (1, 4, 7, and 9) had a

decrease. **Three** districts (2, 5, and 8) remained about the same. No data was available for one district. *Information is provisional only and may change depending on additional reporting from sentinel providers.* **Table 2**



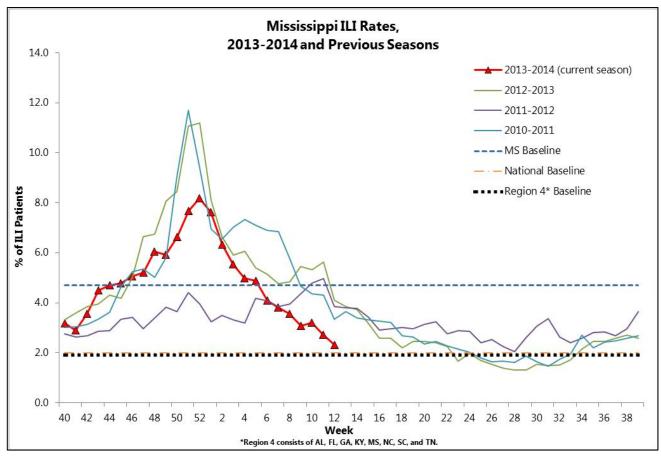
| MSDH District ILI Rates (%) 2013-2014 | | | | | |
|---------------------------------------|---------|---------|--|--|--|
| District | Week 11 | Week 12 | | | |
| State | 2.7 | 2.3 | | | |
| I | 1.1 | 0.0 | | | |
| II | 1.3 | 1.7 | | | |
| III | 0.6 | | | | |
| IV | 3.4 | 2.4 | | | |
| V | 1.9 | 1.5 | | | |
| VI | 4.3 | 7.8 | | | |
| VII | 2.4 | 1.9 | | | |
| VIII | 1.1 | 1.1 | | | |
| IX | 3.9 | 2.6 | | | |

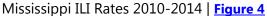


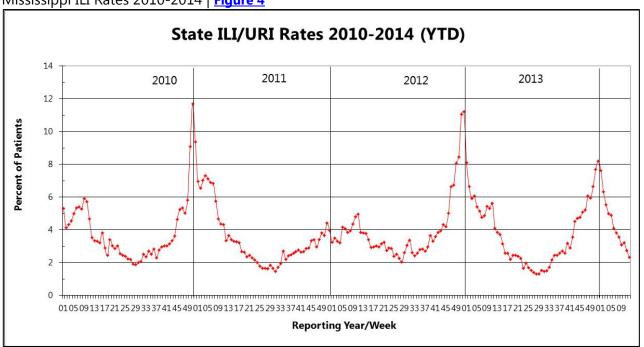
Since week
35, the
percentage of
reported ILI
cases has
been highest
among those
in the **0-4**and **5-24**years of age
groups. This

continued into week 12. | Figure 2

The 2013-14 state ILI rate was **comparable** to the national and Region 4 baselines, but was **below** the state baseline for week **12**. | Figure 3



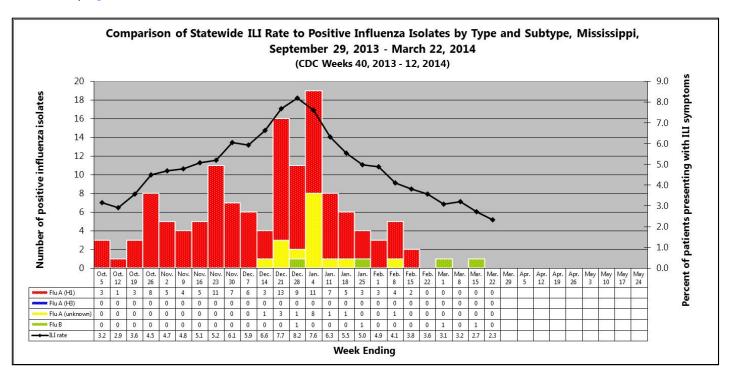




Flu Testing Reports

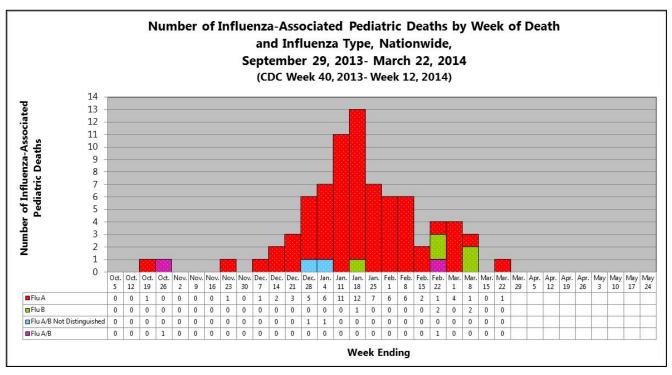
From week **40** (week ending October 5th) through week **12** (week ending March 22nd), **133** positive influenza samples were identified by MSDH. One hundred thirteen (113) of the samples were identified as influenza A (2009 H1N1). Sixteen samples were identified as influenza A (subtype not performed) and four were identified as influenza B.

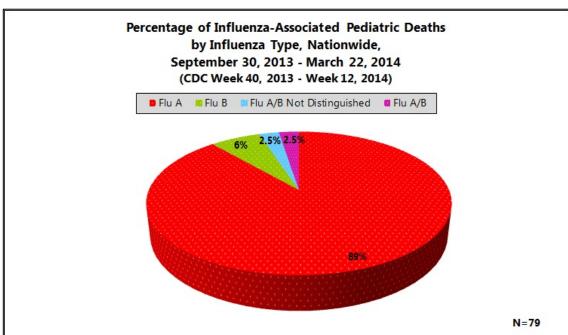
The influenza cases were identified from the following counties: Adams (4), Alcorn (1), Amite (2), Benton (2), Chickasaw (1), Clay (1), Coahoma (5), Copiah (2), Covington (1), Forrest (4), George (2), Grenada (2), Hancock (3), Harrison (17), Hinds (2), Itawamba (1), Jackson (16), Jones (2), Lamar (1), Lauderdale (1), Lawrence (3), Leake (2), Lee (16), Lincoln (1), Marion (1), Marshall (7), Monroe (7), Neshoba (1), Oktibbeha (5), Pearl River (2), Pike (1), Prentiss (1), Stone (1), Tallahatchie (1), Tate (4), Tunica (1), Washington (3), Wayne (1), and Yalobusha (1). The counties of four influenza cases were unknown. | Figure 5



National and Mississippi Pediatric Mortality Surveillance

Nationally, **four** influenza-associated pediatric deaths were reported to CDC during week **12**. One death was associated with a 2009 H1N1 virus and occurred during week 05 (week ending February 1st) and two deaths were associated with influenza A viruses for which no subtyping was performed and occurred during weeks 06 (week ending February 8th) and 12 (week ending March 22nd). One death was associated with an influenza B virus and occurred during week 10 (week ending March 8th). | **Figure 6**





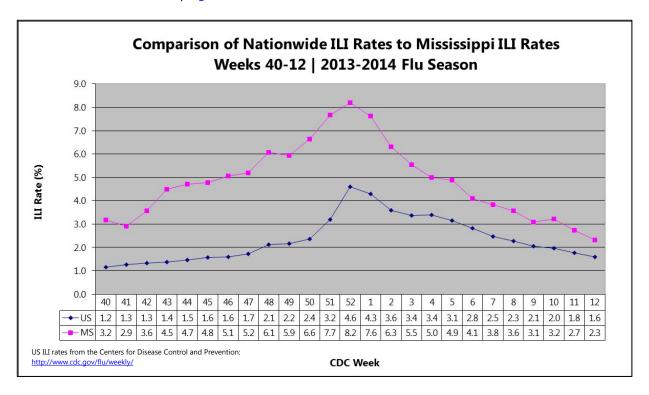
Seventynine influenzaassociated pediatric deaths have been reported nationally during the 2013-2014 season. Of the 79 deaths, 70 (89%) have been attributed to

influenza A viruses, five (6%) to an influenza B virus, two (2.5%) to an influenza A/B virus not distinguished, and two (2.5%) to an influenza A and B virus co-infection.

Mississippi has had **one** influenza-associated pediatric death reported during this influenza season. For additional information on influenza-associated pediatric deaths, please refer to the <u>CDC's FluView</u>.

National ILI Surveillance

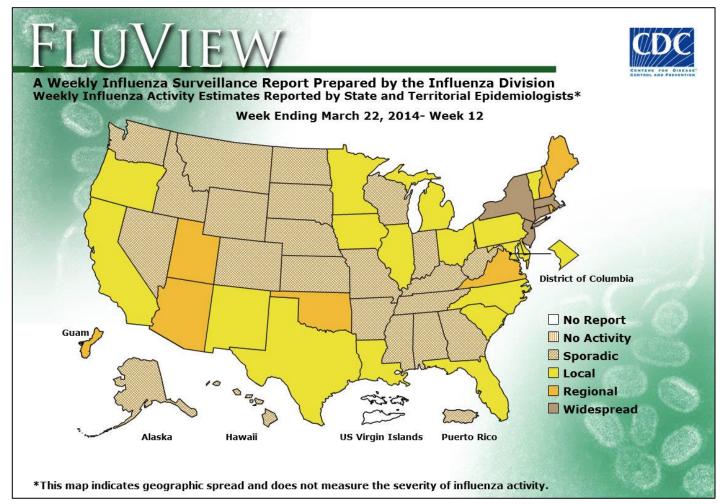
For week **12**, the MS ILI rate (2.3%) continued to remain **above** the national ILI rate (1.6%), but followed national trends. \mid Figure 8



Mississippi reported "Sporadic" flu activity for week 12. | Table 3

| Level of Flu Activity | Definition |
|--------------------------|--|
| No Activity | Overall clinical activity remains low and there are no lab confirmed cases. |
| Sporadic | Isolated cases of lab confirmed influenza in the state; ILI activity is not increased <u>OR</u> A lab-confirmed outbreak in a single institution in the state; ILI activity is not increased. |
| Local | Increased ILI within a single region AND recent (within the past 3 weeks) laboratory evidence of influenza in that region. ILI activity in other regions is not increased <u>OR</u> two of more institutional outbreaks (ILI or lab confirmed) within a single region AND recent (within the past 3 weeks) lab confirmed influenza in that region. Other regions do not have increased ILI and virus activity is no greater than sporadic in those regions |
| Regional | Increased ILI in at least 2 regions but fewer than half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the affected regions <u>OR</u> Institutional outbreaks (ILI or lab confirmed) in at least 2 regions but fewer than half of the regions AND recent lab confirmed influenza in the affected regions. |
| Widespread | Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the state. |

During week 12, influenza activity continued to decrease in the United States. | Figure 9



¹For up-to-date information on flu activity nationwide, please refer to the CDC's website: http://www.cdc.gov/flu/weekly/fluactivitysurv.htm.

Additional information:

| Centers for Disease Control and Prevention | http://cdc.gov/flu/ |
|--|--|
| Centers for Disease Control and Prevention FluView | http://www.cdc.gov/flu/weekly/ |
| Flu.gov | http://www.flu.gov/ |
| MSDH Flu and Pneumonia | http://msdh.ms.gov/msdhsite/ static/14,0,199.html |
| Google Flu Trends | http://www.google.org/flutrends/ |
| World Health Organization FluNet | http://www.who.int/influenza/gisrs laboratory/flunet/en/ |

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Appendix

Figure 1

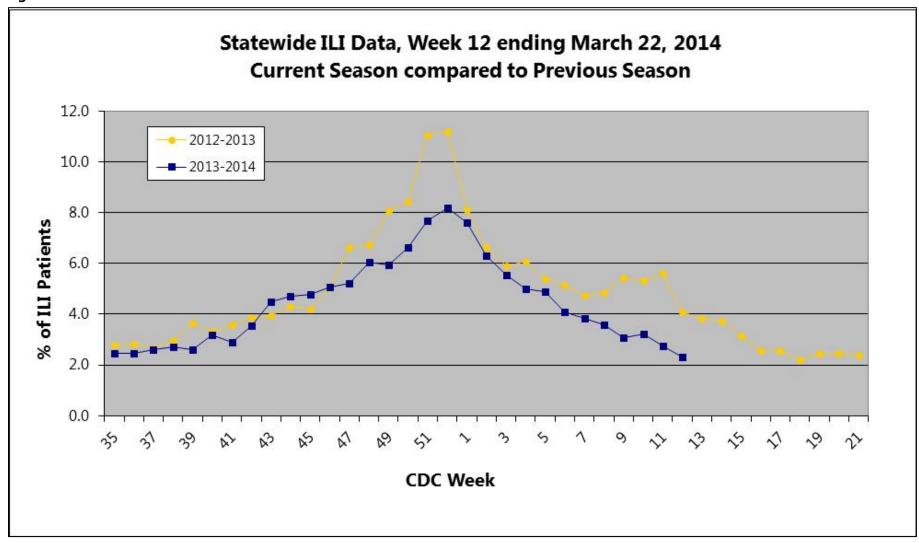


Figure 2

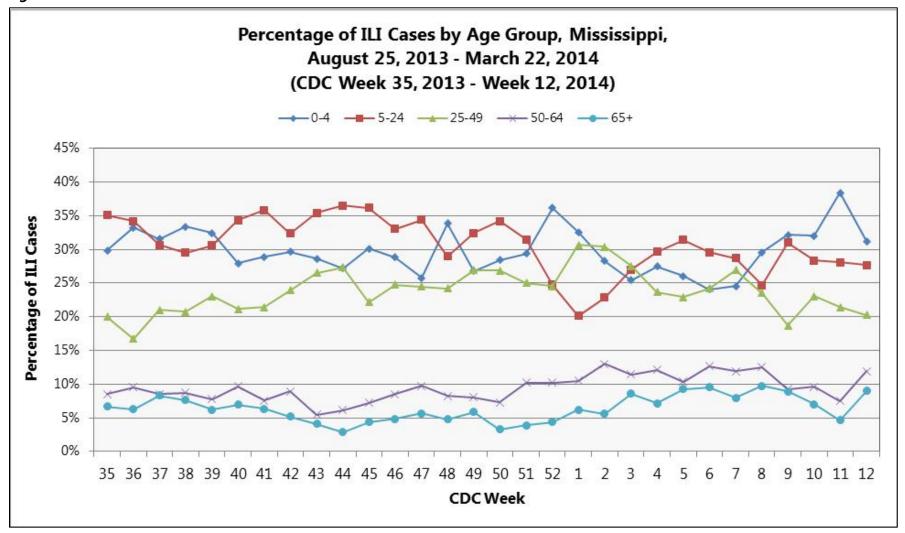


Figure 3

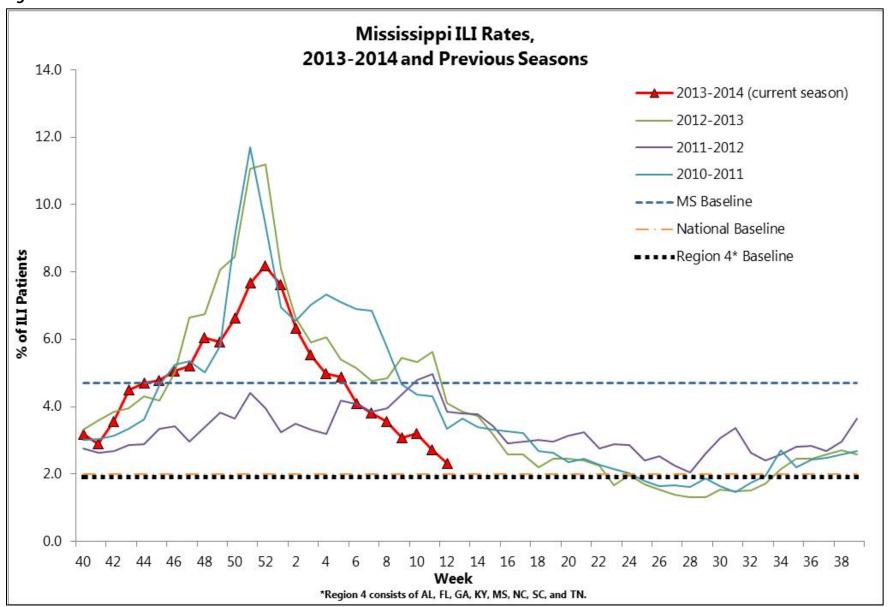


Figure 4

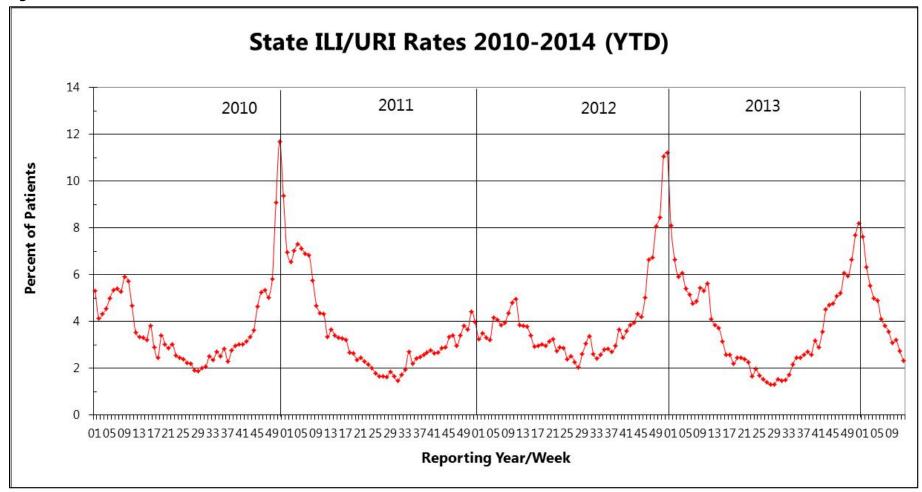


Figure 5

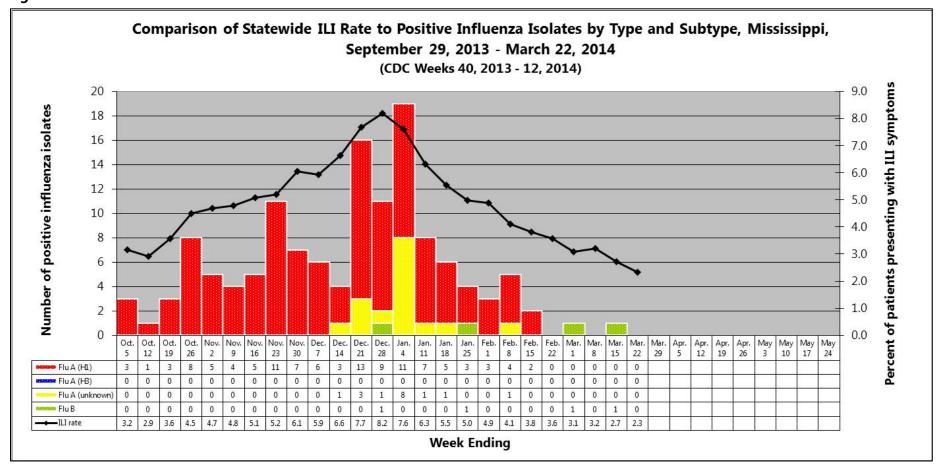


Figure 6

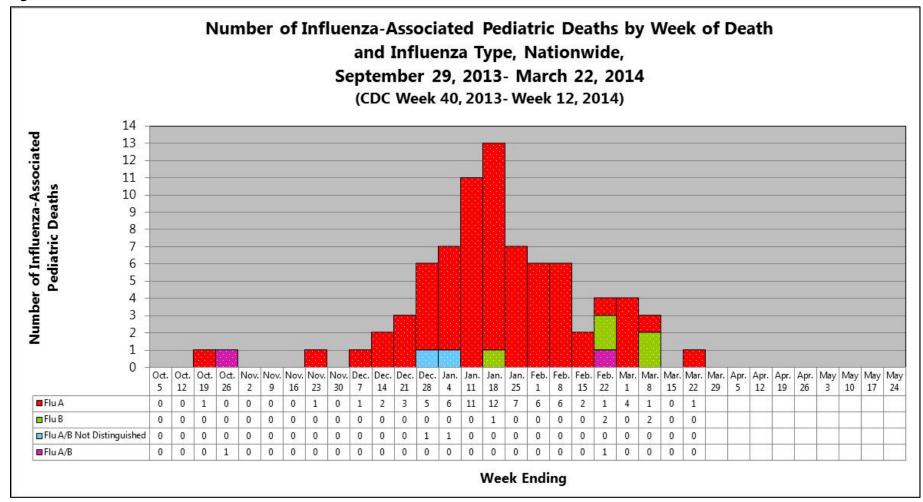


Figure 7

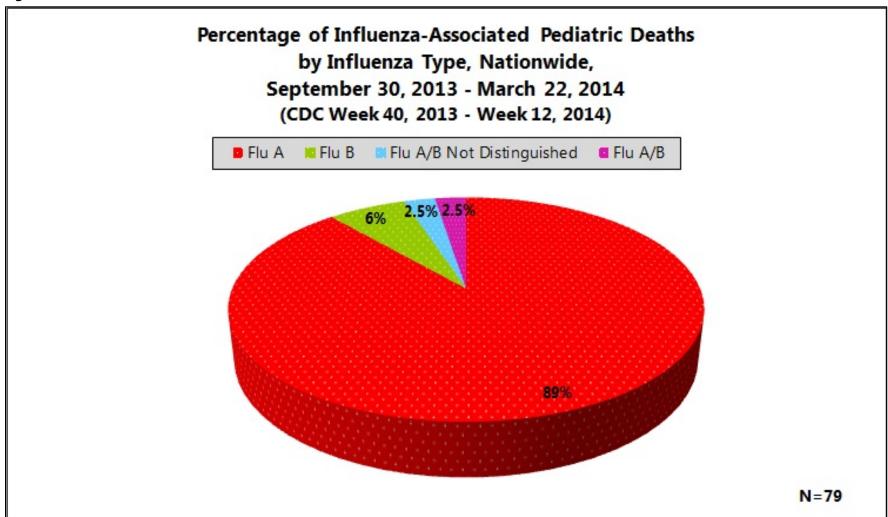


Figure 8

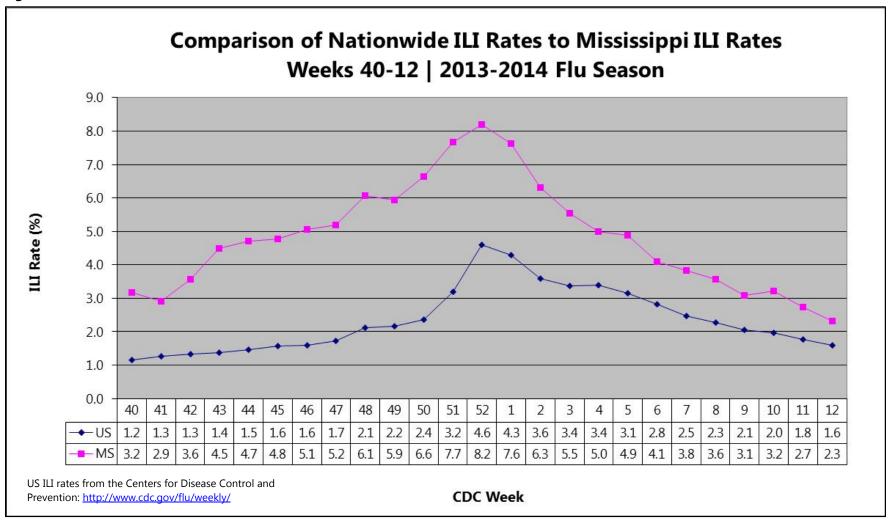


Figure 9

